

Working Paper #7

National Perspective: Review of Public Attitudes and Perceptions¹

The “new era” of tolling largely began since the adoption of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, wherein the Congestion Pricing Pilot Program, later renamed the Value Pricing Pilot Program, endorsed an expanded investigation into new tolling and pricing applications throughout the United States. The new era involved the use of electronic toll collection, toll rates for traffic management, and different applications of infrastructure additions or conversions. By the decade’s end, 15 states had enrolled in the program, and each attempted some facet of tolling or pricing on their highway and road systems.

Through the systematic study of feasibility, as required by the program, definitive public attitudes emerged regarding tolling and pricing in the new era. This section identifies the prevailing trends in public opinion for tolling.

Background

In the 1970s, the Federal government offered grant funding assistance to cities to support demonstrations of road pricing. However, “the opposition was so great from businesses, community groups, and the media that all studies were terminated before demonstration plans could be developed.”² Twenty-five years later, the idea of road pricing has risen again, due to greater flexibility in constructing or converting capacity as provided by electronic technologies. Road pricing now not only includes traditional toll roads, but also variations on toll lanes within existing facilities – generally termed managed lanes.³ In the 1990s, the greatest momentum can be attributed to the potential to combine pricing with high-occupancy vehicle (HOV) facilities, a resulting concept called High-Occupant Toll

¹ Chapter prepared by Texas Transportation Institute, with collaboration from Cambridge Systematics, Inc., and Frank Wilson and Associates.

² Higgins, T. J., 1994, *Congestion Pricing: Implementation Considerations*, Transportation Quarterly, Volume 48, Number 3, Eno Transportation Foundation, summer.

³ *Managed lanes* may include variants, such as *Express Toll Lanes*, *Value Express Lanes*, *High-Occupant/Toll lanes*, and other names. Each nomenclature maintains different assumptions regarding vehicle and user class preference; however, this has not been uniformly applied in either the transportation literature or media.

(HOT) lanes. Although the HOT lane concept has received considerable praise for its applications in California, Texas, and very recently Minnesota, it is still subject to significant public acceptance barriers that originally prevented widespread introduction of such projects in this country.

The concept of tolling is new in many states, and proposed road pricing projects have inevitably been controversial to one extent or another everywhere they have been considered. Public and political support has taken a considerable amount of time to nurture in states with implemented projects, such as California, New York, Minnesota, and Texas. In all states, public opinion was generally lukewarm, at best, to start.^{4,5,6} Only through the concerted efforts of agency champions, project managers, and political leaders are toll concepts able to progress positively in public opinion.

Public acceptance of toll roads, managed lanes, and other concepts may be more elusive than they would otherwise seem. One explanation for low levels of acceptance is that the nature of government in the United States is inherently biased against significant policy change. The closer any agency is to implementing a new toll facility, the greater the agency is at risk of sudden loss in political support due to public opposition.⁷ Within any given state, this scenario can be found in areas with or without existing toll roads.⁸

A variety of reasons contribute to road pricing and other toll concepts remaining controversial, including concerns regarding equity for low-income individuals, geographic distribution of toll benefits and burdens, privacy of electronic toll collection, and taxation implications of the public highway system. Every proposed toll corridor will have its own dedicated user groups (including commuters, transit riders, truckers, and communities served by the facility) that expect their interests to be protected at all costs. Experience nationally has shown that toll projects are an easy target for criticism, which exacerbate the last minute withdrawal problem. It is easy to make headlines that are critical to the concepts, but rare to find lead stories favoring the implementation of tolling, pricing, and their variants. Similarly, politicians can make a name for themselves by criticizing and

⁴ Munnich, L., and J. Loveland, 2005, *Value Pricing and Public Outreach: Minnesota's Lessons Learned*, Transportation Research Board, Paper 05-0394, 84th Annual Meeting, January.

⁵ Ungemah, D., M. Swisher, and C. D. Tighe, 2005, *You're Making Me HOT: Talking High Occupancy Toll (HOT) Lanes with the Denver Public*, Transportation Research Board, Paper 05-1191, 84th Annual Meeting, January.

⁶ Stockton, W. R., C. L. Grant, F. McFarland, N. R. Edmonson, and M. A. Ogden, 1997, *Feasibility of Priority Lane Pricing on the Katy HOV Lane: Feasibility Assessment*, Research Report 2701-F, Texas Transportation Institute, Texas A&M University, June.

⁷ Cain, A., 2005, *Achieving Majority Public Support for Urban Road Pricing: Preserving the Driver's Right to Choose*, Transportation Research Board, Paper 05-1791, 84th Annual Meeting, January.

⁸ In Texas, toll roads and managed lanes have proceeded in the public realm with relatively little controversy in Houston and Dallas. However, significant public opposition in San Antonio, Austin, and Waco has made political support tenuous at best.

even legislating against toll roads and managed lanes, such as in Minnesota and Maryland.

Selected National Experience

The purpose of this section is to review how different projects have measured public acceptability, both before and after implementation of toll projects. Despite the differences in the methods, there are similarities in the findings from these evaluations and lessons to be learned about the willingness of the public to accept the new era of tolling.

California: State Route 91 Express Lanes

The SR 91 Express Lanes facility was originally conceived during the 1980s as a HOV facility by the California Department of Transportation (Caltrans). Following an environmental review, Caltrans endorsed the proposal to construct a four-lane HOV facility for 10 miles in the median of SR 91. At the time, controversy ensued regarding HOV lanes, with the end result of money earmarked for the new lanes being redirected. Following the passage of California's bill that authorized up to four public-private partnerships for transportation projects,⁹ the California Private Transportation Corporation (CPTC) proposed building and operating the lanes as a tolled facility, with discounts for HOV3+. The subsequent changes to environmental documentation did not include substantive public outreach efforts, despite two separate lawsuits with fairness implications, but did collect enough information to provide before-and-after comparisons.

In cooperation with the Federal Highway Administration's (FHWA) Congestion Pricing Pilot Program, Caltrans worked with the California Polytechnic State University to review public attitudes regarding SR 91 after opening. The evaluation study included traveler opinion surveys to measure commuters' views on the project and associated public policies, and to compare pre-project opinions with later personal experience. Surveys were conducted in late 1995, spring 1996, late 1996, and spring 1997 in sample categories of single-occupancy vehicle (SOV), HOV2, and HOV3+. The study also included an opinion survey of area business representatives, conducted in late 1996, to measure their views on the impacts of the express lane facility.

Levels of approval for various aspects of the project rose throughout the course of the study. Although the idea of variable tolls was initially unpopular (with a 45 percent approval rating), later surveys showed a significant increase in approval (to about 60 percent). Approval levels for operating the highway as a private business also rose in

⁹ Assembly Bill 680, passed in 1989.

the 35 to 45 percent range, both before and five months after the facility's opening; and the winter 1996 survey showed that approval levels had since increased to 50 to 60 percent.

Opposition to toll financing was recorded, expressed as a general sense of "unfairness." However, 60 percent of commuters believed tolls were an effective means to address congestion problems, and this percentage increased as commuters witnessed the tangible travel time savings in both HOT and general purpose lanes. Overall, there was a high level of acceptance for congestion pricing.

California: Interstate 15 FasTrak HOT Lanes

The I-15 HOT Lanes (FasTrak) facility in San Diego was one of the original pilot projects of the Congestion Pricing Pilot Program, and the first dynamically priced HOT lane facility in the world. To this day, the I-15 FasTrak project provides the greatest amount of information on public acceptance for HOT lanes, and by extension, express toll lanes.

The eight-mile, two-lane barrier separated, reversible flow HOT lane facility was implemented in phases on the existing I-15 HOV lanes. The first phase involved a sticker-based, fixed monthly price for access for SOVs, called ExpressPass. Within a year, the second phase of implementation began: a dynamically priced HOT lane system offering toll access to SOVs (HOV2+ remained free to use the facility). By 2001, a third phase was under study, which included the construction of managed lanes and Bus Rapid Transit (BRT). The latter study summarizes the evolution of public attitudes for the concept since 1996.¹⁰

Focus groups of I-15 commuters were conducted in mid-1997 prior to the switch from monthly pass (Phase I interim operations) to a per-use dynamic fee system. Participants comprised the following categories: current ExpressPass users, past ExpressPass users, HOV users, and SOV users. According to the study, the project was perceived as successful in pursuing congestion relief, improving existing facilities, and generating revenue. At that point in the project, there were some reservations expressed for the planned switch to the per-use trip fee.

As part of the focus group effort, the participants were guided through a "bidding game," meant to show how the project might be affected by real preferences and actions. To determine pay-per-use preferences, moderators asked respondents how much they would be willing to pay to use the Express Lanes once during an average morning commute. Respondents were then provided different information that might affect the price they were willing to pay. The game demonstrates the learning process consumers go through when they consider purchasing a good. This process involves a base valuation of the

¹⁰San Diego Association of Governments, 2002, *I-15 Managed Lanes Value Pricing Project Planning Study: Volume 2, Public Outreach*, February, http://argo.sandag.org/fastrak/pdfs/concept_plan_vol2.pdf, accessed October 5, 2005.

good, a second valuation once information on the product is provided, and a series of further valuations due to strategic bidding for a limited good or product.

Results of the overall focus group study indicated the following:

Before Project Implementation

- Public opinion generally favorable;
- Existing carpoolers less favorable;
- Solo drivers who were likely to use the facility more favorable; and
- Indications of price sensitivity.

At Conclusion of Phase I

- ExpressPass users remain enthusiastic about program;
- Carpoolers have not reported negative impacts;
- Evidence of price sensitivity – some users left program because of cost;
- Low level of understanding and knowledge of project (particularly by non-ExpressPass users);
- General support for the principle of pricing; and
- Project's objective to support transit service is not widely known or supported.

After Phase II Implementation

The I-15 Attitudinal Panel Study began in the fall of 1997 as the first of five series of surveys to be completed by the end of 1999. In addition to the categories of users identified in the focus groups described above, the telephone surveys included other I-15 users, and I-8 users (as a control corridor). A total of 1,500 commuters were surveyed in each series.

Results revealed the following:

- Eighty-nine percent of ExpressPass users viewed the project as a success.
- Seventy-seven percent thought the program was fair to both travelers in the Express Lanes and in the I-15 general purpose lanes.
- Very few respondents (four percent) were aware that revenues were being used for improved I-15 transit service. Only two percent of all respondents favored using excess revenue for transit, while a combination of 46 percent favored extension of the HOT lanes or improvements to the mainlanes of I-15.

- The only negative feedback or negative media coverage on the project had been related to the expanded bus service, which had not gained the expected ridership.

I-15 Managed Lanes Extension Research

In 2001, a study of a proposed extension to the initial facility was conducted with an accompanying public outreach and assessment component. The project included focus groups, stakeholder interviews, intercept surveys of users, and a telephone-based stated-preference survey. Significant findings from the surveys included:

- Sixty-six percent of respondents approve of the I-15 HOT Lanes program.
- All income groups maintained at least 60 percent approval of the FasTrak program, with higher-income groups more likely to be supportive.
- Higher percentage of respondents approved of the concept of tolling on I-15 than of the FasTrak program itself (77 percent versus 66 percent).
- The majority of the respondents have no objection to the FasTrak concept, either philosophically or practically. They consider the extension fair to general purpose lane users (71 percent) and managed lane users (75 percent).

Texas: Statewide Toll Program

Texas currently has 160 centerline miles of toll roads. These roads are located primarily in the metropolitan areas of Houston and Dallas, operated by the Harris County Toll Road Authority and the North Texas Turnpike Authority, respectively. Central Texas has 77 miles of toll roads under construction, and many smaller communities have projects under development. The toll authorities in Houston and Dallas have been in existence for over 15 years, while new regional mobility authorities are a new mechanism for addressing mobility needs. To date, all of the toll roads in operation have been constructed as new alignment, greenfield projects. Public opinion has been generally accepting of these toll roads and appreciative of having additional travel options.

However, due to increasing demands on the highway system and decreasing tax revenues for funding new construction, the Texas Transportation Commission has asked each district of the Texas Department of Transportation (TxDOT) to consider toll financing for all added capacity projects. This directive has led to considerable discontent among the public, as well as some local officials.

Several market research techniques have been employed around the State to assess the public's opinion on tolling. These have included focus groups, stakeholder interviews, telephone surveys, written surveys, and web-based surveys. As might be expected, reactions have been as diverse as the State. Generally, opinions are within a few percentage

points difference between Texan metropolitan areas¹¹, but those areas with existing toll facilities are not as likely to contain highly visible and vocal opposition to new projects.

The public appears accepting of new toll roads, but the majority remains skeptical of added toll lanes on non-toll roads. According to an ongoing research endeavor in Texas, 71 percent of residents oppose tolling existing roads and 51 percent oppose tolling new roads; 82 percent agree that Texas should expand and improve existing roads before building new roads; and 75 percent feel tolls should be reduced after construction costs are paid.¹²

Focus groups and surveys across the State demonstrate the misunderstandings the public has regarding transportation finance. Common questions include:

- Why doesn't gas tax revenue cover the cost of maintenance and construction?
- Isn't tolling double taxation?
- Why wasn't the shortfall anticipated?

Each of these questions represents a "big picture" perspective, with citizens struggling to ascertain plausible answers to these questions. In focus groups where participants were educated on transportation finance, many participants were surprised to learn the rate of population increase, the increase in vehicle miles traveled, and the fact that gas tax revenues also fund other programs such as the Department of Public Safety and public education. Moreover, many people did not realize how expensive it is to maintain the roads.¹³

Attempts to answer the big picture questions have fallen short, primarily because there was not a concentrated, consistent message at the statewide level to address the knowledge gaps. Each district of TxDOT has pursued and is pursuing toll projects without the benefit of clearly identified messages from the Department that address the public's concerns. On a more local level, the areas of the State that currently have toll roads appear to be more accepting of additional toll roads. However, in many instances, the Department is considering adding toll lanes to freeway lanes or building toll lanes on facilities that the public expected to be upgraded to freeway facilities. This has led to cries of double taxation, allegations of neglect on adjacent free roads, and accusations of attempts by the Department to force motorists onto the toll roads. Each of these concerns is indicative of the ever widening knowledge gaps in the public.

¹¹Podgorski, K., and K. Kockelman, 2005, *Public Perceptions of Toll Roads: A Survey of the Texas Perspective*, Transportation Research Board, Paper 05-1857, 84th Annual Meeting, January.

¹²Draft findings from TxDOT Research Project 0-4817, conducted by Dr. Kara M. Kockelman, University of Texas – Austin, 2005. Final documentation not yet published.

¹³Collier, T., 2004, *Focus Group Testing of Messages on Tolling in Austin*, Texas Transportation Institute, December.

Minnesota: I-394 MnPass HOT Lanes

Minnesota Department of Transportation (MnDOT) opened its first HOT Lane in May 2005 on I-394 in western Minneapolis. The project is similar to the intended operations on the SR 167 HOT lane pilot project in the Puget Sound area. Like Washington, Minnesota has had a long experience with the Congestion Pricing and Value Pricing Pilot Programs. Beginning in 1994, MnDOT explored different pricing applications – new toll corridors, variable bridge pricing, and even areawide pricing for the Twin Cities metropolitan area, but have never had a project actually implemented until the I-394 project. With an intended purpose of improving mobility and enhancing the efficiency of I-394, MnPass provided the country’s first buffer-separated HOT lane facility in the United States.

Public opinion in Minnesota has typically been strained as it regards tolling and pricing. In 1996, a proposed public-private partnership to build a toll road on SH 212 was blocked by a city council veto in the proposed corridor. Enabling legislation provides for cities to veto MnDOT projects – that legislation is still in place. In 1997, the initial proposal to convert I-394 HOV lanes to HOT lanes was withdrawn after public opposition emerged. Minnesota redirected its public outreach strategy in 2001 to facilitate the development of political leadership and champions through a citizen advisory task force. Findings from this effort included:¹⁴

- Top-level champions (such as the Governor) are helpful for setting the tone;
- Outreach to those with influence provide support to top-level champions;
- Coalitions must be maintained through direct action; and
- Preparation must proceed promotion, including letting no question go unanswered, and for correctly tailoring a message to the different audiences.

With new political support for the implementation of the MnPass project, a new public-private partnership was initiated, and the facility opened in spring 2005. A survey of residents was conducted in December 2004 to ascertain perspectives on the upcoming project. Echoing findings from the San Diego surveys, 64 percent of respondents thought the MnPass concept was a good idea, with only 28 percent opposing. Furthermore, support did not vary across income levels. Messages that were reinforced by open-ended responses included “better use of carpool lanes” (24 percent), “adds capacity to the roadway” (19 percent), and “only users pay, not everyone” (12 percent). By comparison,

¹⁴Munnich, L., and J. Loveland, 2005, *Value Pricing and Public Outreach: Minnesota’s Lessons Learned*, Transportation Research Board, Paper 05-0394, 84th Annual Meeting, January.

negative messages, such as “it only benefits the rich” and “carpool lanes should be free for all to use”, were cited by less than eight percent of respondents.¹⁵

Lessons Learned

Barriers to Public Acceptance

Opposition to tolling remains a stubborn public opinion problem. Some opposition may be ideological in basis (such as the perception of tolls as an additional tax); whereas, other opposition may be based upon misperceptions regarding implementation (such as variable pricing being too complicated or unfair). The precedence of tolls in an area can be an advantage if the public is familiar with the concept; however, the only equivalent for the Washington resident is fares on State ferries, or those with long enough memories to recall facilities where tolls have been removed.

Value pricing and tolling overall tends to be more acceptable on new facilities than existing ones. In the case of managed lane and HOT lane projects, pricing is applied to only a portion of the facility, resulting in more choices for the driver, and is, therefore, more likely to be seen as an improvement on the existing facility if it is correctly positioned as such. The availability of a “free” option coexistent with the priced lane or lanes is a significant distinguishing factor in the public acceptability of HOT lanes versus wholesale facility or network pricing. Learning the lesson from Texas, however, it is important to distinguish improvements in a corridor that have been previously promised with gas tax revenue versus those that could become reality quicker with tolls.

Equity issues primarily relate to who gets to use the lanes, at what cost, and how the generated revenues are used. Some fear that tolling and value pricing is too restrictive, benefiting only the more affluent drivers. Observed data on SR 91 and I-15 discredit these concerns from a user perspective, but the conventional wisdom of disproportionate benefits to wealthier commuters can kill a project before it has an opportunity to prove itself, as what happened in Maryland in 2002.¹⁶ For instances of managed lanes, some entirely oppose the concept of providing any benefit to carpoolers, and instead support express toll lanes without carpool discounts; whereas, others insist upon providing free access for all carpools.

¹⁵Hubert H. Humphrey Institute of Public Affairs, 2005, *I-394 MnPass Project Evaluation Attitudinal Panel Survey Final Report*, March.

¹⁶Baltimore Sun, 2004, *Give Toll Lanes a Try*, as reported on TollRoad News, July 28, <http://www.tollroadsnews.com/cgi-bin/a.cgi/Z7qKEOVgEdiRW6r2jffwDw>, accessed October 5, 2005.

Other issues of opposition are less clearly related to equity, but still have a perceived “unfairness” about them. As a private facility, SR 91 faced initial opposition specifically to private, for-profit projects. I-15 researchers found opposition to the inclusion of toll-free HOV2s. The I-15 focus group participants responded negatively to dynamic pricing, which was seen as “price gouging.” They were unclear about why this was so unacceptable, but for them it was.

Public acceptance issues are often location specific. A report from the Claremont Research Institute shows variation in travel among different corridors, indicating “a geographic dimension to travel behavior.”¹⁷ In another report that studied five counties in California, researchers found that “[Toll lane policies] were strongly disliked in Ventura County,” whereas, they had support from the majority of residents in the other four counties surveyed (Los Angeles, Orange, San Bernardino, and Riverside). Other factors, such as the local political context of a project, can create barriers to public acceptance. The SR 91 project, for example, was initially opposed by residents of Riverside County, because it replaced an originally planned HOV lane to be funded by Orange County, as identified earlier in this document. Riverside County residents were especially disturbed since it had already funded and partly built the HOV lane on its side of the county border. Opposition post-implementation from Riverside County helped contribute pressure on CPTC to sell its facility to Orange County Transportation Authority, which reintroduced HOV3+ discounts; however, this action did not completely assuage the concerns of Riverside County residents.

The Selling Points of Tolling

HOT Lanes and Value Pricing

In Washington, HOV options and tolling can be powerful allies in terms of obtaining public acceptability for value pricing. Washington has a rich history of HOV benefits and services, extending from the State’s extensive HOV lane networks to include HOV preference on ferries and extensive vanpool programs. The HOT concept in particular seems to provide a feasible compromise between HOV and toll road advocates, improving on (or in some cases even resuscitating) underutilized HOV lanes, and allowing for limited tolling opportunities where it has not otherwise been applied. Furthermore, additional toll opportunities exist in extremely congested corridors with little political or public appeal for grand capacity expansion projects. Continuing the application of HOV-related preference and/or treatment may provide the sufficient weight to encourage these toll applications.

¹⁷Horan, T., L. Chang, and G. McMurrin, Grant, 1997, *Land Use and Equity Issues in Congestion Pricing: A Compositional Analysis of Five Corridor Markets in Southern California with an Exploration of the Equity Considerations for High Occupancy Toll (HOT) Lanes*, Claremont Research Group for the University of Minnesota, November.

Value pricing projects have the potential to provide benefits to the following:

- The individual driver, who receives additional choices and predictable travel times;
- The HOV network, which has the potential to benefit from more riders, and the riders themselves will have faster and more predictable travel times; if new transit services are included or if transit travel times are improved, potential increased bus ridership is also likely to increase support for transit, thereby, improving service even further; and
- The “whole” system – by providing more person-based capacity for the system, HOT lanes can potentially offer benefits to the remaining components of the network.

In addition to the general value pricing concept, specific projects have their own selling points. For example, SR 91 and I-10 in Houston use preset toll schedules, which at least in the initial stages of a project tend to be more easily understood than dynamic variable pricing, although Minnesota has not reported any problems with public understanding of their dynamically priced systems. I-15 and I-394 can emphasize that their distribution of revenue will benefit the public, especially transit programs. Respondents in the I-15 study increasingly recognized the benefits of the program and encouraged its continuation to help fund BRT service throughout the corridor. At first, the groups felt the program would “reduce stress, save time, and improve the safety of their commutes.” By the end, they had added that it would “help emergencies, get people to work on time, ease congestion, maximize utilization of the lanes, and increase the options available to SOV drivers.”

Selling points can be reinforced by a positive visual image. When Houston’s Katy HOV lane was functioning with additional capacity due to a 3+ occupancy restriction, the transportation agency found that the public is often more concerned with “perceived” failure (the visual image of empty lanes) than figures demonstrating actual efficiencies. Ideally, value pricing mitigates the “empty lane syndrome,” encouraging a positive public perception.

If selling points are effectively incorporated into a marketing scheme, they make a significant difference. Two studies in Oahu, Hawaii and in Los Angeles showed that, when presented as “a time-of-day charge to manage congestion by inducing shifts to transit and travel times,” only 15 percent (Oahu) and 20 percent (Los Angeles) respondents favored the concept. But when presented as “a user fee wherein those using the facility the most pay the most, and where fees go toward road development and maintenance,” 42 percent of the Oahu respondents accepted the idea.¹⁸

¹⁸Higgins, T. J., 1994, *Congestion Pricing: Implementation Considerations*, Transportation Quarterly, Volume 48, Number 3, Eno Transportation Foundation, summer.

New Toll Facilities

Tolling is often cited as a means of advancing the construction of projects (for those that are planned within a fiscally constrained transportation plan), or for financing projects that would not be otherwise constructed. Within the past 10 years, concepts that fall under this category include the construction of new travel lanes (such as express toll lanes) and new toll roads and bridges (outside of any existing travel corridor). Both types of toll facilities have seen recent activity throughout the United States – such as the SR 125 toll road in San Diego, the E-470/Northwest parkway beltway in Denver, the Westpark Tollway in Houston, the Camino Columbia Bridge in Laredo (Texas), and the Dulles Greenway expansion in Washington, D.C. Not all of these projects have been successful, and each has received a share of challenge from public opinion.

The Center for Transportation Research at the University of Texas conducted a statewide public opinion assessment of new toll roads, new toll lanes, and HOT lanes in various areas of Texas for the TxDOT. Majority of respondents indicated that toll roads were unfair (55 percent), should not be used to finance new roads (51 percent), and should not be used to finance improvements to existing roads (71 percent). Negative perceptions of toll roads occurred more often for respondents in areas currently without toll roads (such as Lubbock, Corpus Christi, and San Antonio) than areas with toll roads (such as Houston and Dallas), typically by 10 to 15 percent. Although the negative responses are strong, and indicate a clear public perception issue with the fairness of tolls, it should be noted that Texans favored tolling over fuel taxes in all areas, except San Antonio. Finally, although support for tolls on new and existing roads was low, support for HOT lanes was much stronger, with 52 percent in favor.¹⁹

As indicated in a study of public opinion for new toll roads to be constructed in the Austin area, messages that tended to enhance public acceptance included:²⁰

- The Transportation Department does not currently have any economically feasible and timely alternative funding sources for transportation projects;
- Tolls produce roads faster and help pay off roads quicker;
- Tolls directly connect those who use the facility with those who pay for them;

¹⁹Podgorski, K., and K. Kockelman, 2005, *Public Perceptions of Toll Roads: A Survey of the Texas Perspective*, Center for Transportation Research, University of Texas, http://www.ce.utexas.edu/prof/kockelman/public_html/TRB05PublicResponsetoTRs.pdf, accessed October 9, 2005.

²⁰Texas Department of Transportation, 2005, *Central Texas Toll Road Baseline Marketing Survey*, Final Report, July.

- Additional revenue generated after roads are paid for helps pay for other local transportation projects; and
- Toll road revenues stay in the local area.

Identifying Potential Advocates and Opponents

All tolling proposals should be viewed in the context of the political environment for which it is proposed. There are inherent differences between traditional toll roads and bridges, value pricing, express toll lanes, and HOT lanes that will change the nature of opposition and promotion. Recognizing these differences has proven to be important for advancing any particular project. Opportunities for coalition-building should be examined, as well as the activity levels of local citizen groups and institutions. Potential opinion-setting advocates and opponents, who will influence the opinion of travelers and commuters, can be divided into the following: business groups, environmental groups, government leaders, and transportation professionals.

Business Groups

As traffic congestion and its related costs increase and former solutions become less feasible, many cities, states, and metropolitan planning organizations (MPOs) search for alternatives to government-funded transportation. In some cases, businesses have advocated pricing exemptions for commercial vehicles. But such exemptions may undermine the effectiveness or financial feasibility of the scheme, or may intensify opposition from other motorists.²¹ Business groups are typically among the most influential groups to help champion new toll and value pricing initiatives, if those proposals are shown to either advance roadway projects or improve travel time reliability. Although not typically in opposition to toll projects, business groups may oppose specific proposals for concerns regarding disproportionate commercial toll rates, inability to access properties, or express lane facilities not serving key commercial areas. Finally, business groups may withhold support for specific projects if they are not articulated as a part of an overall system.

Environmental Groups

Many environmental groups promote value pricing, although some do not. Those groups that support the concept point to benefits, such as reduced energy use and air pollution; the preservation of open space; and more cost-effective infrastructure investment if the value pricing project serves to reduce overall vehicular use, or allocates use more efficiently throughout the roadway network. Among those who have supported congestion pricing are Environmental Defense, the Sierra Club, the Tri-State Transportation Coalition

²¹Gomez-Ibanez, J. A., and K. A. Small, 1994, *Road Pricing for Congestion Management: A Survey of International Practice*, National Cooperative Highway Research Program: Synthesis of Highway Practice 210, Transportation Research Board.

(in New York City), the Transit Alliance of Denver, the Pennsylvania Environmental Council, the Oregon Environmental Council, and the Clean Air Coalition (in Los Angeles). Some environmental groups support pricing with the goal of setting the tolls high enough to reduce driving, and then using revenues to fund non-highway projects, such as rail, transit, or bicycle improvements.

Although some environmental groups are supportive of value pricing applications when they help provide system efficiency and higher costs of travel by personal automobile, they generally oppose the construction of new highways or lanes that exacerbate greenfield development, encourage urban sprawl, or encourage travel by SOVs. For example, the Pennsylvania Turnpike Commission has been caught in legal battles with environmental advocates regarding the northern expansion of the Mon-Fayette Expressway, with a variety of issues cited, including noise and air pollution and environmental justice. This has contributed to a significant delay in the planned 70-mile, \$3.5 billion toll system expansion in Pittsburgh.

This example is not limited to new toll facilities outside of existing travel corridors. Environmental groups have opposed the construction of new express toll lanes on I-10 in Houston and the original SR 91 express toll facility. In both scenarios, only meaningful commitments to HOV benefits have been able to overcome the threat of legal battles.

Government Leaders

In dealing with government leaders, attention should be paid to two current trends: 1) a general distrust of the government at all levels, and 2) the devolution to local governmental control. Reflecting government distrust, the public has questioned the government's ability to effectively manage the revenues, as well as the complex technological systems involved with tolling. Furthermore, as evidenced by recent opposition to tolling in Texas, citizens do not accept at face-value the case of declining gas tax revenue as a percentage of transportation need. In fact, with the rapid increase in gasoline prices in 2005, many falsely believe that tax revenue increases with price. But the success of current toll projects in California, Minnesota, New York, and Texas, combined with increasingly localized control, can help to increase the confidence level of both politicians and citizens. Although congestion does not adhere to political boundaries, a shift to local implementation of congestion pricing may be more efficient.

Transportation Professionals

Transportation professionals include planners, engineers, and economists. Transportation engineers and planners are often interested in tolling as it relates to overall system management and revenue generation, as well as the potential to reduce peak-period trips. Although the temptation is present to view tolls as a silver-bullet solution, tolling should be proposed in conjunction with other elements of a regional transportation strategy, such as land use regulations, transportation demand management strategies, intelligent

transportation systems (ITS) technologies, and transit. Transportation professionals are a forgotten interest group when it comes to public opinion, yet they have the wherewithal to kill a pricing project before it comes to fruition.²²

When gauging support from different interest groups, it is important to keep the goals of the project in mind. Decisions about the use of revenue will be important in terms of maintaining support for the toll facility – for many groups, their support is almost entirely dependent on it. For example, environmental groups support value pricing with the assumption that revenues will be used to support alternatives to automobile use; whereas, many other supporting interests want revenues to pay for additional highways and expanded toll lanes, let alone the role a particular toll road or bridge will have in supporting toll corridors elsewhere in a region or state. It will be a challenge to retain support from both types of groups without sacrificing the goals of one or the other.

Public Education Approaches

Public education in the new era of tolling is critical. Public education efforts must consider the geographical and historical context of the projects in addition to their related selling points, barriers, and interest groups. Different groups should be targeted in public education efforts to ensure they have information about what concerns them most. In the I-15 project, for example, carpoolers and transit users had the least favorable impression of the program. They were assured that they would retain top priority and continue to use the lanes for free. If it is the policy of the project to use excess revenues to improve transit and carpool service in the corridor, it is important for this particular user group to be aware of that.

In general, few citizens fully understand the current system of transportation financing, and are unfamiliar with issues like marginal cost and price elasticity as they relate to transportation. Many people feel that value pricing – in particular, differing toll rates by time of day or vehicle occupancy – would not change their travel behavior (or that of others). Developing a simple message for communicating the concept of pricing can be valuable in gaining support. For toll facilities, the messages can be simpler, including project advancement and construction timing. However, interest groups disinclined to new facilities in general (regardless to how these are financed) may use general apprehension towards tolling as the weak point of attack.

In the case of Houston's I-10 HOT lane project, it was determined during the evaluation phase that focused marketing and public education regarding the logistics of the program could enhance usage. One-half of the non-users was not aware of QuickRide; 60 percent had not heard of the program via mass media; and 50 percent were either unaware or

²²Ungemah, D., and M. Swisher, 2006, *So You Want to Make a HOT Lane? The Project Manager's Guide for an HOV to HOT Lane Conversion*, unpublished paper submitted to Transportation Research Board's 85th Annual Meeting, January.

misinformed regarding the logistics of the program, including the procedure for signing up. Initial and ongoing marketing is a key component of early and continuing success.

Efforts are necessary to increase general awareness of why states and regions are exploring tolling. In the early days of the I-15 HOT lane program, when asked what Express lanes were called, respondents were hard pressed to come up with an official name. The I-15 researchers recommended that the San Diego Association of Governments (SANDAG) clearly communicate the goals of the ExpressPass program, decide on a clear name for the lanes, and tell the public where the money is being spent. Minnesota learned the lesson of San Diego, and made marketing and branding a key component of its MnPass project development. Similarly, the Colorado DOT has also placed a high value on branding and marketing for its upcoming HOT lane project, to be opened in spring 2006.

Across all efforts, there appear to be some general messages that resonate with the public – values of simplicity, efficiency, reliability, and project advancement. Messages can help to identify that tolling helps bring projects to fruition now – not 10 years from now. Messages can explain the concept of variable pricing, so that the public understands there is a maximum toll rate, and any variance on the price is perceived as a discount. “Travel time reliability” can also be dealt with in messages. The uncertainty of travel times has led to trips that involve large periods of “buffer time,” incorporated into the trip, characterized by early departure times from the origin. The reliability provided by value pricing applications substantially shortens that buffer time, and that benefit can be advertised.

There are additional messages that the public does understand and that resonate well. The public recognizes that toll projects can be built much faster than traditionally funded projects. In many cases, this has been the only selling point for a toll project in Texas, especially when coupled with the promise that revenues from toll projects will be used in the local area. Most people are knowledgeable of this message, but they are unsure what exactly the revenues will be used for. There are questions of whether revenues will only support toll roads and free roads will be neglected. Preparing answers to these questions will serve to reinforce messages.

Conclusions

The value pricing and tolling projects discussed above have used different methods to measure public acceptance. The I-15 evaluation study pioneered efforts in evaluation for value pricing, placing particular emphasis on the attitudinal and behavioral aspects of both users and non-users of the program. As this data provided important insight into the public acceptability of HOT lane projects, it has become a standard evaluation technique for Minnesota and Colorado, too. A significant lesson in public acceptance of value pricing can be learned from these projects: initial skepticism, as well as openly-expressed opposition to the pricing concept, did not prevent the projects from carefully and judiciously moving forward. Post-implementation feedback has revealed a general reversal

from negative to positive public opinion regarding the concept of pricing in HOV lanes, a common element across all three states.

New toll roads, lanes, and bridges will face a different type of scrutiny from the public – whether there should be a new facility or not. Ideally, these questions should be addressed in the purpose and need analysis, alternatives assessment, and environmental documentation. The role of tolling should not influence the need for a facility. However, reality does not work this way. Opponents of a facility will use apprehension towards tolls as a reason to try and kill a project. Again, only through the careful and deliberate process of planning, documenting, and educating on the nature of proposed projects can negative reaction to tolls be overcome.

The political nature of a community and its interest groups should be considered, but not without the acknowledgment that political climates can change rather drastically. In 1978, the California State Transportation Board suggested that “users should be required to pay a fair share of the costs that occur from their use [of transportation facilities].” But this idea was strongly opposed at the time by interest groups.²³ Tolling in this part of California has since received much support, as evidenced by the success of SR 91, I-15, and SR 125.

According to the authors of *Road Pricing for Congestion Management*, projects that are politically acceptable should exhibit the following characteristics:²⁴

- Be fairly simple in design;
- Build incrementally on previously existing arrangements or experience;
- Address clearly understood and widely supported objectives; and
- Involve transparent financial flows that facilitate public trust in the use of the monies.

The successful tolling and value pricing projects implemented thus far exhibit these qualities and consequently enjoy a high level of public support. Projects that have failed to become reality, or are experiencing strong controversy, generally fail one or more of these qualities.

Section prepared by Texas Transportation Institute, with assistance from Cambridge Systematics, Inc. and Frank Wilson & Associates, Inc.

²³Fielding, G. J., 1994, *Private Toll Roads: Acceptability of Congestion Pricing in Southern California*, Transportation Research Board Special Report.

²⁴Small, K., and J. Gomez-Ibanez, 1994, *Road Pricing for Congestion Management: The Transition from Theory to Practice*, Lincoln Institute of Land Policy.